## Amendments to the Claims

- 1. (Currently amended) A process for producing an aliphatic polyester, comprising: subjecting a cyclic ester containing water and an alcohol which function as initiators or/and molecular weight-adjusting agents to ring-opening polymerization based on while controlling (A) a total proton-concentration of proton sources which include carboxyl (carboxylic acid)-source compounds including water and also alkoxylcarbonyl (ester)-source compounds, and (B) a ratio (carboxylic acid/ester mol ratio) between a mol concentration of the carboxyl (carboxylic acid)-source compound including water compounds and a mol concentration of the alkoxylcarbonyl (ester)-source compounds, as polymerization-controlling indexes so as to provide a weight-average molecular weight and a desired hydrolyzation rate constant, respectively, by varying the contents of the water and the alcohol in the cyclic ester.
- 2. (Original) A production process according to Claim 1, wherein the carboxylic acid/ester mol ratio is in a range of 100/0 2/98.
- 3. (Original) A production process according to Claim 1, wherein the carboxylic acid/ester mol ratio is in a range of 99/1 5/95.
- 4. (Currently amended) A production process according to Claim 1, wherein the total proton-concentration of proton sources in the cyclic ester is adjusted within a range of above 0.09 mol% and below 2.0 mol%.
- 5. (Currently amended) A production process according to Claim 1, wherein the cyclic ester comprises glycolide alone or a mixture of at least 60 wt.% of glycolide and at most 40 wt.% of another cyclic monomer eapable of copolymerizable with glycolide by ring-opening copolymerization with glycolide polymerization.
- 6. (Currently amended) A production process according to Claim 1, wherein the cyclic ester after adjusting the total proton-concentration of proton sources therein is melted under

heating in the presence of a catalyst and then the molten cyclic ester is subjected to ring-opening polymerization to precipitate a resultant polymer.

- 7. (Currently amended) A production process according to Claim 6, wherein the cyclic ester after adjusting the total proton concentration of proton sources therein is melted under heating in the presence of a catalyst, then the molten cyclic ester is transferred to a polymerization apparatus equipped with a plurality of tubes, and the cyclic ester is subjected to ring-opening polymerization in an air-tight state within each tube.
- 8. (Original) A production process according to Claim 7, wherein the plurality of tubes comprise tubes having both ends that can be open and closed.
- 9. (Currently amended) A production process according to Claim 6, wherein the cyclic ester after adjusting the total proton-concentration of proton sources therein is melted under heating in the presence of a catalyst in a melting vessel, then the molten cyclic ester is subjected to ring-opening polymerization in a reaction vessel equipped with a stirrer, and then a resultant polymer is once cooled to be solidified and subjected to solid phase polymerization below the melting point of the polymer.
- 10. (Previously presented) A production process according to Claim 1, wherein the aliphatic polyester produced by the ring-opening polymerization is compounded with a carboxyl group-capping agent.
- 11. (Original) A production process according to Claim 10, wherein 100 wt. parts of the aliphatic polyester is compounded with 0.1 1.8 wt. parts of the carboxyl group-capping agent.
- 12. (Previously presented) A production process according to Claim 10, wherein the carboxyl group-capping agent is selected from the group consisting of monocarbodiimides, polycarbodiimides, oxazolines, oxazolines and epoxy compounds.

- 13. (Previously presented) A production process according to Claim 10, wherein the carboxyl group-capping agent is a monocarbodiimide.
- 14. (Previously presented) A production process according to Claim 1, wherein 100 wt. parts of the aliphatic polyester produced by the ring-opening polymerization is compounded with at most 3 wt. parts of a thermal stabilizer.